



UNITED STATES PATENT AND TRADEMARK OFFICE

an

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,420	11/24/2003	Yong Qiu	NTP-116US	5119

23122 7590 01/17/2007
RATNERPRESTIA
P O BOX 980
VALLEY FORGE, PA 19482-0980

EXAMINER

SANTIAGO, MARICELI

ART UNIT	PAPER NUMBER
----------	--------------

2879

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/720,420

Applicant(s)

QIU ET AL.

Examiner

Mariceli Santiago

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,8 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The Amendment, filed on October 23, 2006, has been entered and acknowledged by the Examiner.

Cancellation of claims 3, 5, 7 and 10-23 has been entered.

Claims 1, 2, 4, 6, 8 and 9 are pending in the instant application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4, 6, 8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki et al. (US 6,849,877).

Regarding claim 1, Yamazaki discloses an organic light-emitting device comprising; a transparent substrate (101), an anode layer, a cathode layer, organic functional layers sandwiched between the anode layer and the cathode layer (Column 2, lines 7-13), an encapsulation layer (111) fabricated on one side or both sides of the device, wherein the encapsulation layer includes a thin multilayer structure (111) which has a period number of 1 to 10 alternating layers formed of a polymer material layer (111b) and a ceramic material layer (111a), the encapsulation layer also includes a thick organic insulation layer (110) on top of the thin multilayer structure, which is made up of polymer materials (Column 5, lines 14-18),

Art Unit: 2879

wherein the polymer material layers in the thin film structure are in the range of 50 to 1000 nm in thickness (Column 6, lines 17-20), the ceramic material layers in the thin film structure are in the range of 10 to 1000 nm in thickness (Column 6, lines 8-11), and the thick organic insulation layer in the encapsulation layer is in the range of 10 to 1000 μ m in thickness (Column 5, lines 14-18).

Regarding claim 2, Yamazaki discloses a device wherein the substrate of the device includes one of glass and plastic (Column 4, lines 48-51).

Regarding claim 4, Yamazaki discloses a device wherein the polymer material layers in the thin film structure include one polymer selected from the group consisting of poly(methyl methacrylate), poly(ethyl methacrylate), and UV curable resins (Column 5, lines 57-63).

Regarding claim 6, Yamazaki discloses a device wherein the ceramic material layers in the thin film structure include one material selected from the group consisting of nitrides, oxides, and nitrogen oxides (Column 5, lines 49-53).

Regarding claim 8, Yamazaki discloses a device wherein the ceramic material layers in the thin film structure include one material selected from the group consisting of silicon nitride, aluminum nitride, titanium nitride, silicon oxide, aluminum oxide, titanium oxide, silicon nitrogen oxide, aluminum nitrogen oxide and titanium nitrogen oxide (Column 5, lines 49-53).

Regarding claim 9, Yamazaki discloses a device wherein the thick organic insulation layer in the encapsulation layer includes UV curable resins (Column 5, lines 14-18).

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 4, 6 8 and 10 have been considered but are moot in view of the new ground(s) of rejection.


Art Unit: 2879

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mariceli Santiago
Primary Examiner
Art Unit 2879